

Electro wet cleaning

Rivolta Special products





Electro wet cleaning

Electrical systems require regular maintenance to ensure continuous safe and smooth operation and reduce follow-up costs. Our cleaning solutions help to improve and restore the electrical conductivity of current-conducting materials and ensure stable resistance values for insulating materials. At the same time, they support the optimisation of thermal conductivity - for maximum efficiency and operational reliability of your applications. Wet cleaning of electrical systems is a cleaning process using liquid cleaning agents. Cleaning can be carried out on de-energised and energised electrical systems.

This means in detail:

- Ensuring the availability of the system
- Maintenance measures in accordance with DGUV regulation 3 (formerly BGV A3 §5) - Proper condition of the electrical system and equipment
- Can also be carried out in the event of mains water, fire and extinguishing water damage as well as after flooding and heavy weather events
- Minimisation and elimination of sources of interference
- Extending the service life of individual components
- Reduction of the risk of fire
- Better identification of faults
- Cleanliness in the workplace

Which systems or components can be cleaned?

Our field service will be happy to advise you! Here are a few examples of where electro wet cleaning can be used:



SWITCH CABINETS, MOTORS AND GENERATORS



LOCAL NETWORK STATIONS



CIRCUIT-BREAKERS AND DISCONNECTORS



DRY AND OIL TRANSFORMERS



WELDING TRANSFORMERS



E-STACKERS, CHARGING COLUMNS, STORAGE AND RETRIEVAL MACHINES, CONDUCTOR RAILS AND SLIP RINGS

De-energised cleaning work

Example of an electrical enclosure cleaning procedure:

1. De-energise the system in compliance with the five safety rules
2. Remove loose dirt
3. Line the base of the switch cabinet with absorbent cloths, foil
4. Dismantle or cover components if necessary
5. Pre-cleaning with **Rivolta O.C.X.** or **E.V.R.**
6. Main cleaning with mit **Rivolta S.L.X. Series**
7. Possible post-treatment of the components with **Rivolta S.L.X. 500**
8. Remove lined cloths
9. Dry the system completely and thoroughly
10. Clean the outside of the switch cabinet ** with **Rivolta B.W.R. 180** or **B.W.K.**
11. Switch the system back on***

* Five safety rules in accordance with DGUV regulation 3: 1. Disconnect, 2. Secure against reconnection, 3. Ensure that no voltage is present, 4. Earth and short-circuit, 5. Cover or isolate neighbouring live parts.

** No live parts.

*** This process description does not claim to be exhaustive. An examination of the exact circumstances and determination of the work steps to be carried out can only be carried out individually by a specialist on site.

Cleaning

Product	Properties	Fields of application
B.W.K.	<ul style="list-style-type: none">• ready-to-use cleaning agent• removes the most stubborn dirt• universally applicable• replacement for solvents	<ul style="list-style-type: none">• for cleaning non-stress-bearing components made of plastic, painted surfaces and metal workshop equipment• mould removal
B.W.S.	<ul style="list-style-type: none">• ready-to-use cleaning agent• quick-drying• very good material compatibility• free from colourants and fragrances	<ul style="list-style-type: none">• for cleaning non-stress-bearing plastic components, painted surfaces and Plexiglas covers• finish surface cleaning
E.V.R.	<ul style="list-style-type: none">• ready-to-use cleaning agent• compatible with metals, plastics, elastomers and solvent-resistant paints• no AuS	<ul style="list-style-type: none">• for pre-cleaning electrical systems• dissolves dirt from the environment, such as pollen and insects
O.C.X.	<ul style="list-style-type: none">• penetrates and dissolves stubborn e.g. oxide and sulphide layers• reduces repair and maintenance costs• non-conductive, does not cause leakage currents	<ul style="list-style-type: none">• wet cleaning of electrical systems and devices• high-frequency, low or high-current technology
S.L.X. 500	<ul style="list-style-type: none">• fast, residue-free evaporation• no flash point• dielectric strength >130 kV/cm	<ul style="list-style-type: none">• wet cleaning of electrical systems and devices, even when energised
S.L.X. 1000	<ul style="list-style-type: none">• fast, residue-free evaporation• no flash point• dielectric strength >190 kV/cm	<ul style="list-style-type: none">• wet cleaning of electrical systems and devices, even when energised
S.L.X. Super	<ul style="list-style-type: none">• slow, residue-free evaporation• no AuS• dielectric strength >190 kV/cm	<ul style="list-style-type: none">• wet cleaning of electrical systems and devices
S.L.X. Top	<ul style="list-style-type: none">• medium-fast, residue-free evaporation• no AuS• dielectric strength up to >150 kV/cm	<ul style="list-style-type: none">• wet cleaning of electrical systems and devices

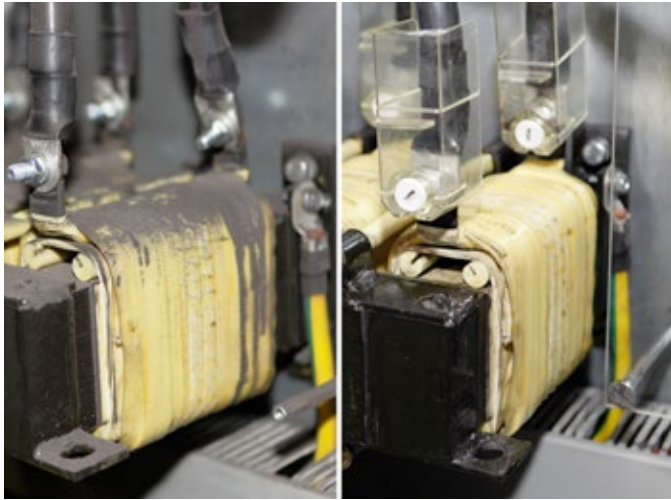


Accessories

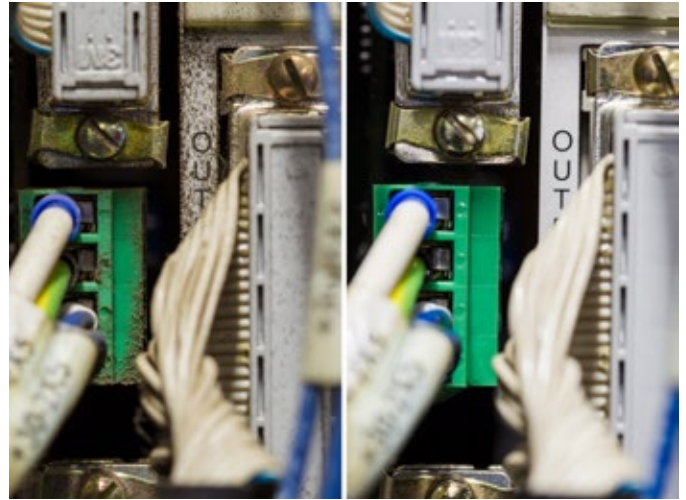
High pressure cleaning device	<ul style="list-style-type: none">• mains-independent device 4 l (6 bar)• for processing electric cleaners• optimum dosing via nozzle• compact and impact-resistant	<ul style="list-style-type: none">• for safe, quick and thorough cleaning of electromechanical assemblies
Wet/Dry vacuum cleaner	<ul style="list-style-type: none">• suction and drying function• high air volume, low pressure• no mechanical damage to components	<ul style="list-style-type: none">• for safe, fast and thorough pre-cleaning and drying of electrical systems
Cleaning pads	<ul style="list-style-type: none">• scouring fleece	<ul style="list-style-type: none">• for removing stubborn/resinous soiling
Foamer	<ul style="list-style-type: none">• large filling volume of 1.5 litres• side-mounted pressure release valve• factory-fitted special nozzle produces a stable, active-cleaning foam	<ul style="list-style-type: none">• for processing aqueous cleaners
High pressure cleaning device SF 23 Pro	<ul style="list-style-type: none">• equipped with safety spraying equipment• device is mounted on a mobile trolley• very low material consumption• low noise level	<ul style="list-style-type: none">• airless processing of the cleaner via membrane technology



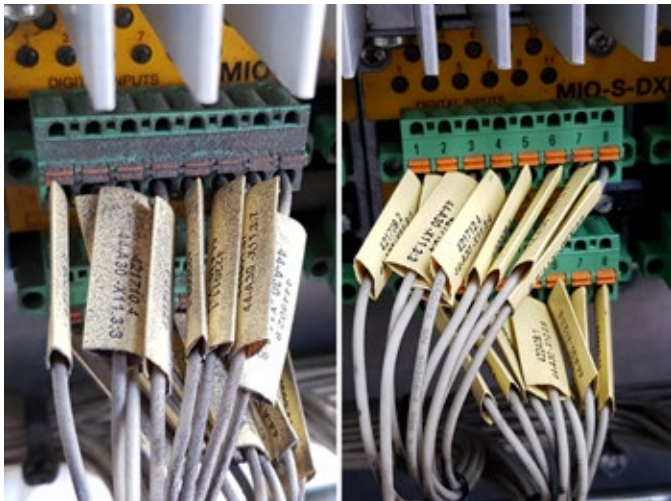
Switch cabinet



Control system



Power strip



Oil transformer



“As an electrician, you are initially sceptical when an electrical operating room is to be cleaned with liquids. However, curiosity and pictures of successful cleanings led us to the decision to take a closer look at this topic. After more than six years of experience with electronic wet cleaning, I can say that I am convinced by this method. If electrical system components of a solar park are to be cleaned with satisfactory results, there is no way around electro wet cleaning. Especially with systems that are exposed to external influences such as dust and insects, conventional methods such as hoovers and hand brushes quickly reach their limits. If all the steps of electro wet cleaning are followed properly and the cleaners are used correctly, there is no other method of getting the stations so thoroughly clean.”

OneSolar
POWERING FUTURE GENERATIONS

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